

Appl. No. 10/731,496
Amdt. dated April 4, 2007
Reply to Office action of March 13, 2007

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AMENDMENTS TO THE CLAIMS

The listing of claims will amend prior versions of the claims in the application:

Listing of Claims

Claim 1 (canceled)

Claim 2 (currently Amended)

The ~~orienter~~ drilling tool assembly as defined in ~~Claim 1~~ claim 16 further including means for rotating said bent portion to a predetermined position.

Claim 3 (currently Amended)

The ~~orienter~~ drilling tool assembly as defined in ~~Claim 1~~ claim 16, wherein said clutch mechanism is a mechanical clutch which transmits torque using physical contact of surfaces.

Claim 4 (currently Amended)

The drilling tool assembly as defined in ~~Claim 1~~ claim 16, further including a means for transmitting information describing the clock face position of said rotatable housing.

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Claim 5 (currently Amended)

The drilling tool assembly as defined in ~~Claim 1~~ claim 16 further including a steering guidance system means within said rotatable housing.

Claim 6-15 (canceled)

Claim 16 (new)

A drilling tool assembly comprising:

a steering system,

a drilling motor,

an orienter and,

a drill bit,

wherein said drilling motor includes a motor output shaft which provides output power to said drill bit;

wherein said orienter includes a first non-rotatable housing and a second rotatable housing;

wherein said first non-rotatable housing surrounds a clutch mechanism and a speed reduction system;

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wherein said clutch mechanism transmits rotary power from said motor output shaft to said speed reduction system, said speed reduction system located between said clutch mechanism and said second rotatable housing;

wherein said second rotatable housing includes a flexible coupling connecting said motor output shaft to an orienter drive shaft which is connected to said drill bit;

wherein said second rotatable housing further includes a bent portion surrounding said orienter drive shaft;

whereby when said clutch mechanism is actuated, rotary power from said motor output shaft is transmitted through said clutch mechanism, through said speed reduction system to rotate said second rotatable housing, while said orienter drive shaft continues to rotate said drill bit.

Claim 17 (new)

The drilling tool assembly as defined in claim 16 wherein;

said drilling tool assembly is constructed and arranged for mounting to the end of a length of coil tubing.

Claim 18 (new)

A method of directional drilling comprising using the drilling tool assembly of claim 16.